



FACT SHEET

## GRID RESILIENCE AND INNOVATION PARTNERSHIPS PROGRAM

Established by the Bipartisan Infrastructure Law, the U.S. Department of Energy's Grid Deployment Office is administering a historic \$10.5 billion investment via the Grid Resilience and Innovation Partnerships (GRIP) program to enhance grid flexibility, improve the resilience of the power system against growing threats of extreme weather and climate change, and ensure American communities have access to affordable, reliable, clean electricity when and where they need it.

# ADVANCING ENERGY RESILIENCE FOR RESIDENTS AND CRITICAL FACILITIES IN KAUKAUNA

The primary goal of this project is to increase reliability and resiliency in an area that serves approximately 6,000 Kaukauna Utilities (KU) customers, including several critical facilities (such as wells, water treatment facilities, utility dispatch centers, emergency services, shelters), as well as three major hydroelectric generation plants. The area mainly consists of two substations: Badger Substation (BAS) and Ann Street Substation (ANS).

Currently, the hydroelectric plants' black-start and restoration procedure calls upon using diesel and/or natural gas generators. With this project, Kaukauna Utilities (KU) will increase the resiliency and reliability of its renewable hydroelectric generation-based grid through battery energy storage system (BESS) integration. By deploying distribution automation

technology that can communicate with the Outage Management System (OMS) of the System Operations Center (SOC) to dispatch resources to remedy the cause of the outage, KU can implement a targeted system restoration resulting in an overall decreased outage duration and reduce or eliminate the need to rely on previous diesel or natural gas generators.

In addition, this project will upgrade KU's grid infrastructure by expanding the existing fiber optic networks, enhancing feeder monitoring and observability, adopting advanced reclosers, adding the ability to reconfigure the grid, reducing customer downtime automatically, and support grid-forming microgrids.

#### **Anticipated Outcomes and Benefits**

- Generate a projected 20% increase in reliability for customer with renewed investment in critical infrastructure serving the community.
- Help maintain low-cost rates and reliable service for customers and accelerate necessary infrastructure improvements by reducing the financial burden on ratepayers to achieve grid modernization objectives.
- Equip Kaukauna Utilities with the expertise to deploy advanced technologies, including Distributed Fault Location Isolation Service Restoration (D-FLISR), BESS, and microgrids.
- > Pay wages equal to or above average for jobs in the region and industry at large.
- Provide internship and apprenticeship opportunities for students.

#### **PROJECT DETAILS**

- Project:Kaukauna Utilities Grid Resilience Project
- Applicant/Selectee:City of Kaukauna
- GRIP Program:
  Grid Innovation Program (Bipartisan Infrastructure Law, Section 40103(b))
- > Federal cost share: \$3,012,462
- Recipient cost share: \$3,012,462
- Project Location: Kaukauna, WI
- Project type:Grid Resilience

### **HELPFUL LINKS**

- > Grid Resilience and Innovation Partnerships Program
- > About the Grid Deployment Office